

Evaluation of PCB congeners in fish tissue

From Rice 1997

PCB congener concentration in small mouth bass tissue  
ug/kg %

| PCB                    | PH Interferences | Dioxin-like? | Percent in    |                | RM3        |              | RM4        |              | RM5        |              | RM6        |              | RM7        |              | RM 7 (10) |          | RM8 SIL     |              | RM8        |              | RM9        |              |
|------------------------|------------------|--------------|---------------|----------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|-----------|----------|-------------|--------------|------------|--------------|------------|--------------|
|                        |                  |              | Canadian Milk | Monkey Mixture | ug/kg      | %            | ug/kg     | %        | ug/kg       | %            | ug/kg      | %            | ug/kg      | %            |
| 52                     |                  |              | 1             | 1.5            | 41         | 9.9%         | 20.5       | 7.4%         | 12.1       | 6.3%         | 4.35       | 2.4%         | 12.96      | 4.9%         | 1.7       | 3.3%     | 10.713      | 0.7%         | 10.5       | 3.1%         | 18.2       | 5.0%         |
| 66                     |                  |              | 2             | 2.9            | 53.2       | 12.8%        | 20         | 7.2%         | 10.4       | 5.4%         | 5.9        | 3.3%         | 11.23      | 4.3%         | 1.8       | 3.5%     | 7.37        | 0.5%         | 11.5       | 3.4%         | 19.5       | 5.4%         |
| 74                     | + 61, 70, 76     |              | 8.8           | 10.4           | 50.4       | 12.2%        | 23         | 8.3%         | 13.8       | 7.2%         | 6.87       | 3.8%         | 11.22      | 4.3%         | 1.8       | 3.5%     | 7.46        | 0.5%         | 10.9       | 3.2%         | 22.5       | 6.2%         |
| 105                    |                  | c            | 3             | 4.4            | 20         | 4.8%         | 9.22       | 3.3%         | 9.22       | 4.8%         | 4.43       | 2.5%         | 6.86       | 2.6%         | 1.1       | 2.1%     | 7.0167      | 0.4%         | 7.87       | 2.3%         | 15.3       | 4.2%         |
| 118                    |                  | c            | 10.3          | 12.8           | 51.1       | 12.3%        | 33.8       | 12.2%        | 23.4       | 12.2%        | 14         | 7.8%         | 20.2       | 7.7%         | 3.4       | 6.5%     | 40.5        | 2.5%         | 23.3       | 6.8%         | 42.6       | 11.7%        |
| 138                    | + 129, 160, 163  |              | 14.8          | 17.5           | 62.4       | 15.1%        | 49.7       | 17.9%        | 36         | 18.8%        | 36.5       | 20.4%        | 46.27      | 17.6%        | 9.1       | 17.5%    | 348.67      | 21.4%        | 66.3       | 19.4%        | 72.6       | 20.0%        |
| 153                    | + 168            |              | 15.1          | 18.6           | 65.4       | 15.8%        | 55.2       | 19.9%        | 38.7       | 20.2%        | 42.1       | 23.5%        | 60.93      | 23.1%        | 12.5      | 24.0%    | 446         | 27.3%        | 83.9       | 24.5%        | 77         | 21.2%        |
| 156                    |                  | c            | 3.3           | 4.7            | 4.47       | 1.1%         | 4.04       | 1.5%         | 3.31       | 1.7%         | 2.53       | 1.4%         | 3.873      | 1.5%         | 0.8       | 1.5%     | 20.9        | 1.3%         | 5.51       | 1.6%         | 6.7        | 1.8%         |
| 157                    |                  | c            | 1             | 1.5            | 0.899      | 0.2%         | 0.79       | 0.3%         | 0.651      | 0.3%         | 0.426      | 0.2%         | 0.535      | 0.2%         | 0.1       | 0.2%     | 1.394       | 0.1%         | 0.715      | 0.2%         | 1.26       | 0.3%         |
| 180                    | + 193            |              | 10.3          | 12.8           | 30.8       | 7.4%         | 30.7       | 11.0%        | 22.7       | 11.8%        | 32.6       | 18.2%        | 45.9       | 17.4%        | 10.2      | 19.6%    | 371.33      | 22.8%        | 61.4       | 17.9%        | 44.1       | 12.1%        |
| 183                    | + 185            |              | 1.8           | 2.3            | 9.18       | 2.2%         | 8.09       | 2.9%         | 6.11       | 3.2%         | 6.67       | 3.7%         | 11.51      | 4.4%         | 2.6       | 5.0%     | 107.23      | 6.6%         | 16.3       | 4.8%         | 11.3       | 3.1%         |
| 187                    |                  |              | 3.8           | 4.7            | 18.7       | 4.5%         | 15.5       | 5.6%         | 9.98       | 5.2%         | 16.2       | 9.0%         | 21.17      | 8.0%         | 4.3       | 8.3%     | 173         | 10.6%        | 27.5       | 8.0%         | 21.9       | 6.0%         |
| 189                    |                  | c            | 0.3           | 0.5            | 0.369      | 0.1%         | 0.37       | 0.1%         | 0.279      | 0.1%         | 0.317      | 0.2%         | 0.6        | 0.2%         | 0.1       | 0.2%     | 5.12        | 0.3%         | 0.76       | 0.2%         | 0.533      | 0.1%         |
| 194                    |                  |              | 2             | 2.9            | 3.37       | 0.8%         | 3.71       | 1.3%         | 2.64       | 1.4%         | 3.55       | 2.0%         | 5.953      | 2.3%         | 1.4       | 2.7%     | 53.367      | 3.3%         | 8.47       | 2.5%         | 5.49       | 1.5%         |
| 203                    |                  |              | 1.8           | 2.3            | 2.97       | 0.7%         | 3.18       | 1.1%         | 2.34       | 1.2%         | 2.66       | 1.5%         | 4.25       | 1.6%         | 1.1       | 2.1%     | 32.067      | 2.0%         | 7.35       | 2.1%         | 4.07       | 1.1%         |
| <b>Total</b>           |                  |              | <b>79</b>     | <b>100</b>     | <b>414</b> | <b>1</b>     | <b>278</b> | <b>1</b>     | <b>192</b> | <b>1</b>     | <b>179</b> | <b>1</b>     | <b>263</b> | <b>1</b>     | <b>52</b> | <b>1</b> | <b>1632</b> | <b>1</b>     | <b>342</b> | <b>1</b>     | <b>363</b> | <b>1</b>     |
| <b>Total congeners</b> |                  |              |               |                | <b>930</b> | <b>44.5%</b> | <b>630</b> | <b>44.1%</b> | <b>420</b> | <b>45.6%</b> | <b>340</b> | <b>52.7%</b> | <b>530</b> | <b>49.7%</b> |           |          | <b>3000</b> | <b>54.4%</b> | <b>660</b> | <b>51.9%</b> | <b>750</b> | <b>48.4%</b> |

| PCB | PCB                 |
|-----|---------------------|
| 52  | 2,2',5,5'           |
| 66  | 2,3',4,4'           |
| 74  | 2,4,4',5            |
| 105 | 2,3,3',4,4'         |
| 118 | 2,3',4,4',5         |
| 138 | 2,2',3,4,4',5'      |
| 153 | 2,2',4,4',5,5'      |
| 156 | 2,3,3',4,4',5       |
| 157 | 2,3,3',4,4',5'      |
| 180 | 2,2',3,4,4',5,5'    |
| 183 | 2,2',3,4,4',5',6    |
| 187 | 2,2',3,4',5,5',6    |
| 189 | 2,3,3',4,4',5,5'    |
| 194 | 2,2',3,3',4,4',5,5' |
| 203 | 2,2',3,4,4',5,5',6  |